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| 09/854,942 | 05/15/2001 | Christopher Timothy John Stamper | 723-1078 | 7953 |

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NIXON & VANDERHYE P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201

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| EXAMINER |
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NGUYEN, PHU K

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| ART UNIT | PAPER NUMBER |
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2671

DATE MAILED: 10/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,942

Applicant(s)

STAMPER ET AL.

Examiner

Phu K. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. *Phu K. Nguyen*

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

In reviewing Applicant's Information Disclosure Statements, it is noted that Applicant cited a large number of references, but did not state why they have been cited, or how they are related to the claimed invention. It is also unclear as which 1449 forms are used in this reference, which are used for the related application because some of them are labeled differently. Also, all of the information, known to Applicant, about these references must be provided, such as class, subclass, publication date, ... must be shown in the 1449 Forms. Also, there is unclear as why Applicant submits the PTO-892 forms cited in US application 09/788,574. To clarify all of these confusion, Applicant is requested to submit a new information disclosure statement, which includes the reasons for why each of the references has been cited or its relevance to the present invention; and new PTO-1449 forms with all its information such that publication date, class, subclass, ... known to Applicant, to Examiner for review and initial.

In reviewing Applicant's Disclosure, due to a large number of corrections and amendments, the examining of this Application is very difficult. Applicant is requested to submit a substitute Disclosure for purpose of record, and later published if it is issued for patentable subject matter.

In reviewing the drawings, Examiner notes that the drawing are copied with blurring features. FORMAL drawings are requested.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over OHBA (4,885,702).

As per claim 1, Ohba teaches the claimed "system for playing interactive images" using a handheld controller (Ohba, figure 32, trackball 108, mouse 110) that produces image control signals in response to manipulation by a user, the system including a console that generates images (Ohba, image forming apparatus), including an animated three-dimensional player, for display during image play, the console including a processor (Ohba, processor 105) and a memory (Ohba, memories 106, 112) that stores an image program, wherein: the processor receives said control signals from the

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handheld controller (Ohba, column 29, lines 33-37), said console generating a display of the animated three-dimensional player in response to accessing a memory storing the game program, the game program including an image editor (Ohba, column 30, lines 4-13), wherein the editor maps an imported two-dimensional image onto the animated three-dimensional player (Ohba, column 29, line 61 to column 30, line 10), wherein the game program animates said three-dimensional player to move under control of said game control signals the processor receives from the handheld controller (Ohba, column 30, lines 11-45). It is noted that Ohba does not teach that the interactive images belongs to a "video game". Uhlin teaches that the video game using animated 3D player such as a human face is well known (Uhlin, column 4, lines 39-48; column 5, lines 16-24). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching of Uhlin, to configure Ohba's system as claimed because the 3D object can be represented in any video images such as video game.

Claim 2 adds into claim 1 "wherein the imported two dimensional image is an image of a face" which Ohba teaches in column 29, lines 46-51.

Claim 3 adds into claim 1 "a digital camera coupled to said processor system, and said digital camera captures the two dimensional image in real time under control of the game program" which Ohba suggests in column 29, lines 52-56.

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Claim 4 adds into claim 3 "wherein the digital camera is included in a removable cartridge insertable into an insertion port associated with the console" which would have been obvious because such arrangement of the digital camera to a computer system is well known in the graphics art.

Claim 5 adds into claim 1 "wherein the processor comprises a microcontroller and a graphics processor" which Ohba teaches in column 29, lines 17-32.

Claim 6 adds into claim 1 "wherein the memory storing the game program and the video editor is included in a game cartridge insertable into an insertion port associated with the console" which would have been obvious because such arrangement of the video game to a computer system is well known in the graphics art.

Claim 7 adds into claim 1 "a player memory electrically coupled to said processor and storing, in the player memory, data indicative of the two-dimensional image as mapped onto the three-dimensional player" which Ohba teaches in column 26, lines 31-38, and column 29, lines 46-60.

Claim 8 adds into claim 7 "wherein the player memory is separable from the console" which would have been obvious because such arrangement of the digital memory to a computer system is well known in the graphics art.

Claim 9 adds into claim 7 "wherein the player memory is a portable removable memory cartridge" which would have been obvious because such arrangement of the digital memory to a computer system is well known in the graphics art.

Claim 10 adds into claim 9 "wherein the player cartridge physically connects to the controller" which would have been obvious because such arrangement of the digital memory to a computer system is well known in the graphics art.

Claim 11 adds into claim 1 "wherein the handheld controller is a hand controller separate from the console" which Ohba suggests with the input devices 108-110.

Claim 12 adds into claim 1 "wherein said handheld controller comprises first and second handheld controllers each having a player cartridge storing data indicative of different two-dimensional images" which Ohba suggests in figure 32, stored data 1 and 2, and input devices 108-110.

Claim 13 adds into claim 1 "a display coupled to said console and showing the three-dimensional player during game play" which Ohba teaches in figure 32, display device 103.

Claim 14 adds into claim 13 "wherein said display is a television" which Ohba suggests in figure 32, the display 103 with the 2D screen DSP.

Claim 15 adds into claim 1 "wherein the image editor provides a coordinate identifier that identifies coordinates on the 2D image to be mapped to triangles for a 3D face" which Ohba teaches in column 27, line 51 to column 28, line 26.

Claim 26 adds into claim 1 "wherein the image editor is operated by the user of the video game in response to manipulation of said handheld controller" which Ohba suggests in column 27, lines 24-42.

Claim 17 adds into claim 1 "wherein the image editor allows editing in either a 2D mode or a 3D mode" which Ohba teaches in column 28, lines 27-53.

Claim 18 adds into claim 1 "wherein the image editor allows editing of a 2D image while displaying the 3D image in real time to show the 3D effects of said editing" which Ohba suggests in column 27, line 51 to column 28, line 20.

Claim 19 adds into claim 1 "wherein the image editor allows the user to select between plural 3D heads on which to map a 2D image" which Ohba teaches in the data 1 and 2 in the face data memory 106.

Claim 20 adds into claim 1 "wherein the image editor also manipulates a 3D head onto which to map the 2D image, in order improve the appearance of a 2D face mapped onto the head" which Ohba suggests in column 30, lines 14-65.

Claim 21 adds into claim 20 "wherein the editor provides for 3D head manipulation of both the front view shape and the front-to-back dimension of the head" which Ohba suggests in figures 33-34.

Claim 22 adds into claim 1 " a portable storage device that stores a representation of a personalized game player" which Uhlin teaches in column 4, lines 39-48 and column 5, lines 16-24. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching of Uhlin, to configure Ohba's system as claimed because the 3D object can be represented in any video images such as video game.

Claim 23 adds into claim 1 "wherein said image editor maps a 2D facial image onto a 3D head" which Ohba teaches in column 29, lines 46-60.

Claim 24 adds into claim 1 "wherein the image editor randomly places the two-dimensional image onto computer controlled players" which would have been obvious because the faces of the players can be arbitrarily selected from the face memory 106.

Claim 25 adds into claim 1 "wherein the image editor maps the 2D image onto a selected 3D head" which Ohba teaches in column 29, lines 46-60.

Claim 26 adds into claim 1 "wherein the controller includes an insertion slot for receiving a digital camera having a 2D image capture memory disposed therein, said controller insertion slot also receiving a memory for storing a 3D head pre-mapped with the 2D image" which would have been obvious because such arrangement of the digital camera to a computer system is well known in the graphics art.

Claim 27 adds into claim 1 "wherein the image editor personalizes a game player to have the face of the user of the video game system" which would have been obvious because the faces of the players can be arbitrarily generated or selected from the face memory 106.

Claim 28 adds into claim 1 "wherein said video game system includes plural handheld controllers for simultaneous operation by plural associated users each having a video game character associated therewith" which would have been obvious because the video image system having a plural inputs can be implemented as video game with plurality of users.

Claim 29 adds into claim 28 "wherein each of said plural video game characters has a personalized face specified by an associated user" which would have been obvious because the faces of the players can be arbitrarily generated or selected from the face memory 106.

Claim 30 adds into claim 1 "wherein said image editor includes a real time image capture routine that displays a captured image within a template of a predetermined shape" which Ohba suggests with the facial video images captured by the video camera in column 29, lines 52-60 to be textured on the 3D objects.

Claim 31 adds into claim 30 "said template predetermined shape comprises an oval" which would be obvious because the texture map can be use any geometric form for mapping.

Claim 32 adds into claim 1 "wherein the image editor includes a face mapping routine that determines the center of the 2D image relative to a predetermined portion of the three-dimensional player" which Ohba teaches in column 29, line 46 to column 30, line 65.

Claim 33 adds into claim 1 "wherein the image editor calculates transformed texture coordinates for each of plural vertices of a polygon mesh defining said

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three-dimensional player” which Ohba teaches in column 29, line 46 to column 30, line 51; Uhlin teaches in column 4, lines 39-48; column 5, lines 16-24.

Claim 34 adds into claim 1 “wherein the image editor permits the user to edit at least one of the color and the shape of said two-dimensional image by manipulating the handheld controller” which Ohba teaches in column 30, lines 4-13.

Claim 35 adds into claim 1 “wherein the image editor automatically balances the contrast of the image to reduce unintended effects of shading on the image” which would have been obvious because Ohba image processor can apply any well known image enhance technique to the facial object such as shading.

Claim 36 adds into claim 35 “wherein the image editor balances the contrast by comparing the brightness of one side of the image to the brightness of other side of the image, and adjusts contrast in response to results of the comparison” which would have been obvious because Ohba image processor can apply any well known image enhance technique to the facial object such as contrast balancing.

Claim 37 adds into claim 36 “wherein the image editor applies brightness adjustment linearly across the image without adjusting brightness at the center of the image, in order to avoid creating a perceptible contrast change at the image center” which would have been obvious because Ohba image processor can apply any well

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known image enhance technique to the facial object such as contrast balancing using linear brightness adjustment.


Claim 38 adds into claim 1 "wherein the image editor applies a non-linear filter to the two-dimensional image so as to modify image intensity as a function of position" which would have been obvious because Ohba image processor can apply any well known image enhance technique to the facial object such as applying a non-linear filter to modify the intensity.

Claims 39-45 claim a method based on the system of claims 1-34; therefore, they are rejected under the same reason.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (703)305 - 9796. The examiner can normally be reached on M-F 8:00-4:30.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3800.

Phu K. Nguyen
September 24, 2003


PHU K. NGUYEN
PATENT EXAMINER
SEP 24 2003